

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 90-108
NPDES NO. CA0005185

WASTE DISCHARGE REQUIREMENTS FOR:

MORTON INTERNATIONAL, INC.
NEWARK, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Morton International, Inc., Morton Salt Division, hereinafter called the discharger, located at 7380 Morton Avenue in Newark operates a facility for the manufacture of salt. By application dated June 29, 1989 the discharger has applied for reissuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).
2. The discharger uses salt brine to produce a variety of salt products.
3. The discharger discharges an average of 0.027 million gallons per day (mgd) of wastewater into a drainage ditch which runs approximately one mile before draining into Alameda County Flood Control line F-1, which is tributary to Plummer Creek Slough and Southern San Francisco Bay.
4. The discharge consists of overflow from the cooling water pond where condensate and cooling water from multiple effect evaporators is pumped for storage and reuse. In addition stormwater runoff is routed to the drainage ditch for discharge. All other wastewaters are collected in a wastewater recovery pond and recycled and are not discharged to State Waters. The discharger also maintains three sludge ponds on 1.5 acres. Saline sludge is deposited in the ponds.
5. Wastewater treatment consists of pH reduction by carbon dioxide addition. Algal growth in the cooling water pond can cause the pH to exceed the 8.5 pH unit effluent limit.
6. The discharge is presently governed by Waste Discharge Requirements, Order No. 84-85 which allow discharge into a dead-end slough.

7. This discharge is considered a non-process wastewater discharge that does not contain characteristics of concern to beneficial uses as defined in the Basin Plan. The Basin Plan prohibition against discharges containing "characteristics of concern to beneficial uses" into dead-end sloughs is therefore not applicable.
8. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) in December 1986. The State Water Resources Control Board approved it in May 1987. The Basin Plan contains water quality objectives for Southern San Francisco Bay and contiguous waters.
9. The beneficial uses of Southern San Francisco Bay and contiguous water bodies are:
 - o Water contact recreation
 - o Non-contact water recreation
 - o Wildlife habitat
 - o Preservation of rare and endangered species
 - o Fish migration and spawning
 - o Industrial service supply
 - o Navigation
 - o Commercial and sport fishing
 - o Shellfish harvesting
 - o Estuarine habitat
10. Effluent limitations, toxic effluent standards, established pursuant to Section 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.
11. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) have not been promulgated by the U.S. Environmental Protection Agency for this type of discharge. Effluent limitations of the Order are based on the Basin Plan, State Plans and Policies, current plant performance, and best professional judgement. The limitations are considered to be those attainable by BAT, in the judgement of the Board.
12. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
13. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided

them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

14. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Morton International, Inc. in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Effluent discharge shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>30-day Average</u>	<u>Maximum Daily</u>
Total suspended solids (TSS)	kg/day mg/l	28 30	42 45
Settleable matter	mL/L-hr	0.1	0.2
Temperature	degrees-F		90
Oil and Grease	kg/day mg/l	4.5 5	7.7 8

2. The pH of the discharge shall not exceed 9.0 nor be less than 6.5.
3. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

TOXICITY: The survival of three-spine stickleback and fathead minnow (or rainbow trout) in a 96-hour bioassay shall not be less than the following:

- a. Any four consecutive determinations: 90 percentile value of 70% minimum.
- b. Average of any three or more consecutive determinations: 90% median.

B. Receiving Water Limitations

1. The discharge of waste shall not cause the following

conditions to exist in waters of the State at any place:

- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
- b. Bottom deposits or aquatic growths;
- c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
- d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

- a. Dissolved Oxygen 7.0 mg/L minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen
- b. pH Variation from natural ambient pH by more than 0.5 pH units.
- c. Un-ionized ammonia 0.025 mg/L as N Annual Median
0.4 mg/L as N maximum.

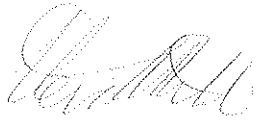
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 84-85 adopted on December 18, 1984. Order No. 84-85 is hereby rescinded.
2. The discharger shall comply with all sections of this order immediately upon adoption.
3. The discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
4. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.
5. Upon adoption by the Board of a policy decision regarding allowance for minor effluent pH excursions for dischargers with continuous pH monitoring, this permit will be revised to incorporate the policy.
6. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986, except items B.2 and C.8.
7. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).
8. Pursuant to Environmental Protection Agency regulations [40 CFR 122.42(a)] the Discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant.
9. This Order expires August 15, 1995. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
10. This Order shall serve as a National Pollutant Discharge

Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on August 15, 1990.



STEVEN R. RITCHIE
Executive Officer

Attachments:

Standard Provisions & Reporting
Requirements, December 1986
Self Monitoring Program
Resolution 74-10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

MORTON INTERNATIONAL, INC.

NEWARK FACILITY

NEWARK, ALAMEDA COUNTY

NPDES NO. CA0005185

ORDER NO. 90-108

SMP CONSISTS OF

PART A, dated December 1986

AND

PART B, Ordered August 15, 1990

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E	At any point in the discharger's wastewater ditch between the point at which the wastewater leaves the discharger's property and the point at which all waste tributary to the ditch is present.

B. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C	The wastewater ditch below the discharge weir.

C. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
L-1 thru L-'n'	Located along the perimeter levees of the two sludge ponds at equidistant intervals not to exceed 50 feet. (A sketch showing the locations of these stations shall accompany each report)

II. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling and analysis is given in Table I (attached).

III. MODIFICATIONS OF PART A

Delete items D.2.a., E.1.e., E.1.f., E.5.b., F.3., F.5., G.4.c. Instead of monthly reports as specified in G.4., written reports shall be submitted quarterly.

IV. MISCELLANEOUS REPORTING

A. Violations of any permit limitations shall be reported on the quarterly transmittal letter accompanying the self-monitoring report in the following format or

equivalent:

1. Parameter of <u>Violated Limit</u>	Violation <u>Ratio</u>	Permit <u>Limit</u>	Value (or range of values) of <u>Violation</u>
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2. Remedy or proposed remedy to restore compliance.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 90-108.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.



STEVEN R. RITCHIE
Executive Officer

DATE ORDERED August 15, 1990

Attachments: Table I - Schedule for Sampling, measurements, and analysis

TABLE I

SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSES
FOR SELF-MONITORING PROGRAM

FOR ORDER NO. ____ - ____

NPDES NO. CA0005185

Sampling Stations	E		L				
Type of Sample	C-24	G	O				
Flow Rate (mgd)	W						
Settleable Solids (ml/l-hr)		W					
Total Suspended Solids (mg/l & lbs/day)	W						
Temperature (°F)		D					
Oil and Grease (mg/l & kg/day)		M ^{1/}					
pH (units)		W					
Bioassay (% survival in undiluted waste)	Q						
Total Dissolved Solids (mg/l & lbs/day)	M						
All Applicable Standard Observations		W	M				

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample, 24-hour
O = observation

FREQUENCY OF SAMPLING

D = once each day
W = once each week
M = once each month
Q = once each quarter

TYPES OF STATIONS

E = waste effluent stations
L = basin and/or pond stations

1/ see attached "Oil and Grease Sample Collection"